

PATENT  
09/994,440  
Docket 091/010c

### REMARKS

This paper is responsive to the Office Action dated July 17, 2004, which is the second non-final action on the merits of the application.

Claims 1-15 were previously pending, and stand variously rejected. Upon entry of this paper, certain claims are amended and under examination.

Applicant gratefully acknowledges withdrawal of the rejection under 35 USC § 112 ¶ 1. The claims stand newly rejected under § 103 with respect to a combination of previous publications.

Applicant understands that responsibility for this application has reverted to Examiner Thái-An N. Ton. Further consideration and allowance of the application is respectfully requested.

#### Amendments:

Entry of the amendments to the specification does not introduce new matter into the disclosure. The amendment to paragraph [0096] is taken directly from page 5, lines 20-23 of priority document 60/213,739. The amendment to paragraph [0099] is taken directly from page 15, lines 10-13 of the priority document. USSN 60/213,739 is incorporated into the present disclosure in its entirety by reference on page 1, lines 13-18 of the application as filed (paragraphs [0001] and [0002] of the application as published).

The amendments to the claims are made voluntarily to capture aspects of the invention of current commercial interest. Accordingly, coverage is maintained for equivalents of the claims as originally presented, and of the newly introduced limitations. Applicant reserves the right to reintroduce claims to additional subject matter described in the specification in this or any related application.

#### Interview summary:

The undersigned is grateful to Examiners Thái-An N. Ton, Joseph T. Woitach, and Deborah Crouch for the courtesy of an interview at the Patent Office on Thursday, September 2, 2004. Possible claim amendments and arguments were discussed, along with possible declaration evidence regarding growing pPS cells in different media. The Examiners agreed that the present application would not be cited as prior art against subsequent applications by Geron Corporation et al. on culturing pPS cells in media not previously conditioned with feeder cells.

This Response incorporates amendments and remarks discussed during the interview.

PATENT  
09/994,440  
Docket 091/010c

### Double Patenting

Certain claims in this application stand provisionally rejected for double patenting, with respect to certain claims of pending applications USSN 10/330,873 (Docket 061/006d); 10/235,094 (Docket 091/030); 09/859,291 (Docket 091/006); and 10/087,473 (Docket 090/003c).

Applicant undertakes to address this issue appropriately upon determination that the claims in the present application and in USSN 09/859,291; and 10/087,473 are otherwise patentable. A first Office Action on the merits has not yet been produced for the other cited applications. It is expected that the present application will be allowed at an earlier date.

### Rejection under 35 USC § 103:

Claims 1-15 stand rejected as being unpatentable over publications by Thomson et al., in combination with a previous patent by Gearhart et al. (U.S. Patent No. 6,245,566).

Applicant respectfully disagrees. The publications by Thomson et al. relate to primate embryonic stem cells. The patent by Gearhart et al. relates to human embryonic germ cells. Thomson et al. teach very specifically that primate embryonic stem cells should be cultured on a layer of feeder cells in order to keep them from differentiating. On the other hand, the Gearhart patent teaches that growing hEG cells depend on the presence of a ligand that binds to a receptor that associates with glycoprotein 130 (i.e., leukemia inhibitory factor or oncostatin M), in combination with a growth factor. All the working examples in the Gearhart disclosure also involve culturing the hEG cells in a layer of STO feeder cells (e.g., Example 2, col. 25). Embryonic stem cells are derived from blastocysts, while hEG cells are obtained from the gonadal ridge of a more fully developed fetus. There is no suggestion in either reference of what if any techniques proposed for culturing hEG cells can be adapted to culture embryonic stem cells.

The present application describes and claims new derivation procedures as they pertain to hES cells in particular.

Withdrawal of this rejection is respectfully requested.

PATENT  
09/994,440  
Docket 091/010c

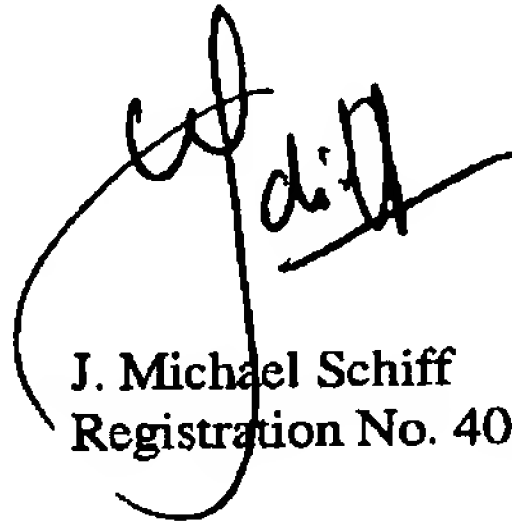
Request for Further Interview

Applicant respectfully requests that all outstanding rejections be reconsidered and withdrawn. The application is believed to be in condition for allowance, and a prompt Notice of Allowance is requested. In the event that the Examiner determines that there are other matters to be addressed, applicant hereby requests an interview by telephone.

Fees Due

No fee is believed due with respect to the filing of this amendment. Nevertheless, should the Patent Office determine that a further extension of time or any other relief is required for further consideration of this application, applicant hereby petitions for such relief, and authorizes the Commissioner to charge the cost of such petitions and other fees due in connection with the filing of these papers to Deposit Account No. 07-1139, referencing the docket number indicated above.

Respectfully submitted,



J. Michael Schiff  
Registration No. 40,253

GERON CORPORATION  
230 Constitution Drive  
Menlo Park, CA 94025  
Telephone: (650) 473-7715  
Fax: (650) 473-8654

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